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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,583	11/20/2001	Stephen Todd	07072-146001	9738

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EMC CORPORATION  
c/o DALY, CROWLEY, MOFFORD & DURKEE, LLP  
354 ATURNPIKE STREET  
SUITE 301A  
CANTON, MA 02021-2714

EXAMINER

LESNIEWSKI, VICTOR D

ART UNIT PAPER NUMBER

2152

DATE MAILED: 12/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/989,583		TODD ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Victor Lesniewski		2152	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. <u>20051216</u> .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____.  | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

1. The amendment filed 10/24/2005 has been placed of record in the file.
2. Claims 1 and 19-23 have been amended.
3. Claims 1-23 are now pending.
4. The applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the following new grounds of rejection.

***Continued Examination Under 37 CFR 1.114***

5. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous office action has been withdrawn pursuant to 37 CFR 1.114. The applicant's submission filed on 10/11/2005 has been entered.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6, 8-11, and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al. (U.S. Patent Number 6,421,737), hereinafter referred to as Stone, in view of Wilson et al. (U.S. Patent Number 6,714,976), hereinafter referred to as Wilson.

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8. Stone disclosed a system for monitoring selected resources of a computing system using standardized monitoring modules. In an analogous art, Wilson disclosed a system for automated monitoring of network resources using diagnostic information. Both systems satisfy the need for more efficient network monitoring.

9. Concerning claims 1, 19, and 20, Stone did not explicitly state a database comprising at least one table containing the at least one of the configuration information and the customer information. However, Wilson does state this feature as his monitoring system stores monitored configuration values in a data repository. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Stone by adding the ability to utilize a database comprising at least one table containing the at least one of the configuration information and the customer information as provided by Wilson. Here the combination satisfies the need for simpler and more effective means for monitoring network diagnostic information. See Wilson, column 2, lines 6-14. This rationale also applies to those dependent claims utilizing the same combination.

10. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a computer program product or a system are rejected under the same rationale applied to the described claim.

11. Thereby, the combination of Stone and Wilson discloses:

- <Claims 1, 19, and 20>

A method of managing resources, comprising: connecting to the resources (Stone, column 3, lines 24-32); providing executable modules corresponding to the resources, the modules each implementing a common interface and corresponding to a different one of

the resources (Stone, column 3, lines 24-29 and 55-62); making calls to the common interface in each of the executable modules to cause the executable modules to return information about the corresponding resources, wherein the information includes at least one of configuration information and customer information (Stone, column 6, lines 10-22 and Wilson, column 10, lines 7-33); and storing the information about the corresponding resources in a database comprising at least one table containing the at least one of the configuration information and the customer information (Stone, figure 1, item 17 and Wilson, column 14, lines 35-67).

- <Claim 2>

The method of claim 1, wherein the resources comprise data storage resources (Stone, column 3, lines 29-32).

- <Claim 3>

The method of claim 2, wherein the data storage resources reside in a datacenter controlled by a storage service provider (Stone, column 3, lines 29-32).

Although Stone does not use the terminology “service provider,” he does explicitly disclose a number of resources stored on such computing equipment as network servers. From Stone’s system it is clearly inherent that if these resources exist on network servers, then there exists a provider for these resources. In support of this inherency, Newton’s Telecom Dictionary 2002, as previously cited, has been introduced. See MPEP 2131.01.

- <Claim 4>

The method of claim 3, further comprising presenting the information to an administrator of the storage service provider (Stone, column 6, lines 17-20).

- <Claim 5>

The method of claim 4, wherein the information comprises data storage resource attributes (Stone, column 5, lines 20-32).

- <Claim 6>

The method of claim 5, further comprising enabling the administrator to select, for a given data storage resource, which of the data storage attributes are to be stored in the database (Stone, column 5, lines 29-32).

- <Claim 8>

The method of claim 4, further comprising: generating a directory of the executable modules; and placing each of the executable modules in the directory (Stone, figure 1, item 16).

- <Claim 9>

The method of claim 8, wherein the common interface comprises a set of methods (Stone, column 3, lines 55-62).

- <Claim 10>

The method of claim 9, wherein the methods include a first method that, when called, cause the executable module to identify the class of resources monitored by that executable module, and a second method that, when called, causes the executable module to discover any resources within the identified class that are connected (Stone, column 4, lines 51-66).

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- <Claim 11>

The method of claim 10, wherein the methods further include a third method that, when called, causes the executable module to poll the resources that were discovered by the executable module (Stone, column 5, lines 52-67).

- <Claim 17>

The method of claim 5, further comprising: adding a new data storage resource to the datacenter (Stone, column 2, lines 49-56); connecting to the new data storage resource (Stone, column 3, lines 24-32); providing a new one of the executables modules to correspond to the new data storage resource (Stone, column 2, lines 52-56); and placing the new one of the executable modules in the directory (Stone, column 2, lines 56-59).

- <Claim 18>

The method of claim 17, wherein making calls to the common interface comprises making calls to a common interface in the new one of the executable modules (Stone, column 2, lines 49-66).

- <Claims 21, 22, and 23>

The method of claim 1 wherein the at least one table is selected from a customer-resource association table, a customer account table, and a configuration table (Wilson, column 14, lines 35-46).

Since the combination of Stone and Wilson discloses all of the above limitations, claims 1-6, 8-11, and 17-23 are rejected.

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12. Claims 7 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone in view of Wilson, as applied above, further in view of Nine et al. (U.S. Patent Number 6,560,611), hereinafter referred to as Nine.

13. The combination of Stone and Wilson disclosed a system for monitoring selected resources of a computing system using standardized monitoring modules. In an analogous art, Nine disclosed a network monitoring system for monitoring all services and conditions on various networks. Both systems satisfy the need for more efficient network monitoring.

14. Concerning claim 7, although the combination of Stone and Wilson did not explicitly state the use of executable modules with Java, Nine states the use of Java in his system. Since the inventions solve the same problem, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Stone and Wilson by adding the ability to utilize Java as provided by Nine. Here, the combination satisfies the need for more efficient network monitoring. See Nine, column 1, lines 47-55.

15. Concerning claims 12 and 13, although the combination of Stone and Wilson did not explicitly state the use of XML to provide polling results, Nine states the use of XML in his system. Since the inventions solve the same problem, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Stone and Wilson by adding the ability to utilize XML as provided by Nine. Again, the combination satisfies the need for more efficient network monitoring. See Nine, column 1, lines 47-55.

16. Concerning claim 14, although the combination of Stone and Wilson did not explicitly state returning a list of services to the user, Nine states this feature in his system. Since the



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inventions solve the same problem, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Stone and Wilson by adding the ability to return a list of services to the user as provided by Nine. Again, the combination satisfies the need for more efficient network monitoring. See Nine, column 1, lines 47-55.

17. The above rationale also applies to those dependent claims utilizing the same combination.

18. Thereby, the combination of Stone, Wilson, and Nine discloses:

- <Claim 7>

The method of claim 1, wherein the executable modules comprise JAVA classes (Nine, column 9, lines 55-65).

- <Claim 12>

The method of claim 11, wherein results of the polling are provided in XML format (Nine, column 3, lines 37-48).

- <Claim 13>

The method of claim 11, wherein the results of the polling are provided in a format other than XML and the executable module performing the polling converts the results of the polling to XML format (Nine, column 3, lines 37-48).

Furthermore, it is well known in the art to convert data into an alternate format in a network when needed.

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- <Claim 14>

The method of claim 11, wherein the methods further comprise a fourth method that, when called, causes the executable module to return a list of services and associated parameters (Nine, column 5, line 60 through column 6, line 8).

- <Claim 15>

The method of claim 12, wherein the methods further comprise a fifth method that, when called, causes the executable module to execute a requested one of the services on a list of services (Nine, column 6, lines 9-20).

- <Claim 16>

The method of claim 15, wherein making calls to the common interface comprises making a call to the fifth method, and wherein making a call to the fifth method comprises specifying values of parameters associated with the requested one of the services received from a customer of the service provider (Nine, column 6, lines 20-25).

Since the combination of Stone, Wilson, and Nine discloses all of the above limitations, claims 7 and 12-16 are rejected.

### *Conclusion*

19. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

- Short et al. (U.S. Patent Number 6,178,529) disclosed a cluster service in a cluster server that connects to a resource monitoring component to control and monitor the health of one or more resource objects.

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- Singh (U.S. Patent Number 6,308,206) disclosed a method for using the Internet to create applications that perform network management functions.
- Landan (U.S. Patent Number 6,449,739) disclosed a monitoring system that allows users to monitor the post-deployment performance of a web-based or other transactional server based on execution results of test case data.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987.


The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Victor Lesniewski  
Patent Examiner  
Group Art Unit 2152



**BUNJOB JAROENCHONWANIT**  
**PRIMARY EXAMINER**